

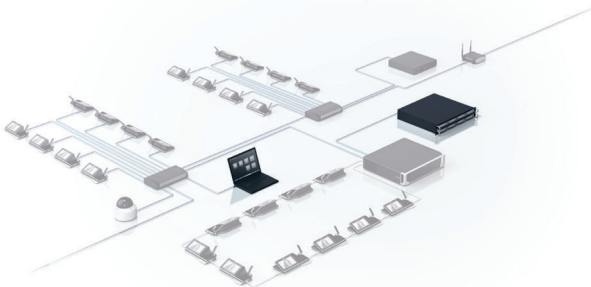
DCN multimedia System Server Software

www.boschsecurity.com



BOSCH

Invented for life



- ▶ Automatic device discovery
- ▶ Control up-to 750 multimedia devices
- ▶ Client server solution
- ▶ No user interaction needed to run the system
- ▶ Automatic seat creation and assignment

The DCN multimedia System Software is used as a platform that controls the entire DCN multimedia system. Basic functions are included where others can be added depending on the functionality required.

System overview

In addition to the Bosch ST standard terms and conditions of sales, the Bosch DCN multimedia System Software is a great option to benefit from the Bosch maintenance service, keeping your DCN multimedia System Software always up-to-date. Refer to the product related information on www.boschsecurity.com.

Functions

DCN multimedia System Software is built as a server client solution and consists of two main components: The Server Software and the Meeting Application.

Server Software

The Server Software is a set of Windows services. The individual services do not have user interfaces and are running at the background to control and monitor all the DCN multimedia components and optionally the Meeting Application(s) running on client PCs. To inform the user, a user interface is present for system state and diagnostics. Next to the services, it contains

a license activation module. This module is needed to activate the license of the complete DCN multimedia conference system.

Once, the Server Software has been configured by means of the Meeting Application, the Server Software can run autonomic without any user intervention.

Meeting Application

The Meeting Application acts as a PC user interface, to configure the system and to manage and prepare meetings. This application is, next to the Multimedia Device, the user interface of the system. To prepare and manage a meeting from the Meeting Application the DCN multimedia Meeting Preparation and Management software module is needed.

The software server and meeting application(s) can, but not necessarily need to, run on separate computers. This allows the possibility for assigning functionality to different users and/or PCs – for instance, let one or more users configure the system (configure) while others are registering persons and assign them to become participants (prepare meeting) and others can actually manage the meeting (manage meeting) on a separate PC.

The system software contains the following basic functionally:

Configuration from the Meeting application:

- Devices are automatically discovered and can be automatic or manual assigned to a seat.
- Setup chairperson seat.
- User management.
- Setup volumes of multimedia loudspeakers and sound reinforcement output on DCNM-APS.
- Enable/disable Acoustic feedback suppression.
- 5-band parametric room equalization.
- User definable priority and summon tones.

Functions that can be accessed from a multimedia device which is setup as a chairperson seat:

- Microphone modes:
 - Open mode automatic, Open mode manual managed, Override mode.
- Number of open microphones: 1 to 25.
- Number of waiting speakers: 0 to 200.
- Enable/disable automatic microphone off after 30 seconds.
- Enable/disable priority tone.
- Master volume control.
- Initiate a summon chime.

The PC running the software server must be activated with a license before it can be used. When DCNM-LSYS DCN multimedia system software is ordered, it is sent by e-mail; the e-mail contains all information how to activate the system.

If the PC running the software server needs to be replaced, an easy-to-use solution is in place to activate the replacement PC, without the need to order new software. Your Bosch representative can provide more information on this, if required.

Parts included

Quantity	Components
1	E-mail with activation information.

Technical specifications

Technical

In this section the minimal requirements for each part of the system will be listed. For an overview of which parts are required or optional please refer to the DCN multimedia manual System Overview sections.

PC

A PC can be used for three purposes:

1. PC running the server software in a multi-PC system.
2. Client PC (running the Meeting Application only).
3. Single PC used for both above purposes.

For each use there are minimal requirements as listed in below table.

Single PC system running server software and meeting application:	<ul style="list-style-type: none"> • Windows server 2008 R2 64 bits, or: • Windows server 2012 R2 64 bits (including .NET Framework 3.5 feature): • Processor i5 4 cores 2.4 GHZ. • 8 GByte RAM. • 20 GB free disk space.
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PC running the server software in a multi-PC system:	<ul style="list-style-type: none"> • 1 GB Ethernet card. • Windows server 2008 R2 64 bits, or: • Windows server 2012 R2 64 bits (including .NET Framework 3.5 feature): • Processor i5 4 cores, 2.4 GHZ. • 8 GByte RAM. • 20 GB free disk space. • 1 GB Ethernet card.
PC running the meeting application only:	<ul style="list-style-type: none"> • Windows 7 home premium 64 bits, or: • Windows 8 Pro 64 bits (including .NET Framework 3.5 feature): • Processor i5 4 cores, 2.4 GHZ. • 8 GByte RAM. • 20 GB free disk space. • 1 GB Ethernet card.

Switches

The following minimal requirements apply to switches:

- 1 Gbit or higher with hardware switching capabilities.
- Quality of Service through differentiated services with 4 or more output queues and strict priority packet scheduling.
- (Optional) IGMPv3 or IGMPv2 snooping. To optimize bandwidth usage, IGMP snooping can be used. This is useful in systems with >10 multicast channels, although not absolutely required. Sufficient performance for handling a large number of IGMP query responses, depending on the number of (directly or indirectly) connected devices to that switch. Hardware support for IGMP is strongly recommended.
- (Optional) (Rapid) Spanning Tree support in case redundant networks are used.
- (Optional) SNMPv3 support for switch supervision purposes.

Routers

The following minimal requirements apply to routers:

- 1 Gbit or higher Ethernet ports.
- Supports PIM-DM or Bidirectional PIM.
- Performs IP routing in hardware (i.e. a 'layer 3 switch') to minimize the routing delay.
- Packet forwarding rate > 1,000,000 packets per second per port (e.g. 8 Mpps for an 8-port router).
- Non-blocking backplane per switching port, i.e. 2 Gbit per port (e.g. 16 Gbps for an 8-port router).
- MAC address table of at least 1000 addresses per directly connected subnet.

Ordering information

DCN multimedia System Server Software

DCN multimedia System Software controls the entire DCN multimedia system. Other software modules can be added to extend functionality. Configuration can be done using the Meeting Application.

Order number **DCNM-LSYS**

Software Options

DCN multimedia Meeting Prep & Management

DCN multimedia Meeting Preparation and Management software module gives the ability to prepare and manage meetings using the meeting application. Can only be used in combination with DCNM-LSYS.

Order number **DCNM-LMPM**

DCN multimedia Participant Database

DCN multimedia Participant Database gives the ability to define participant's names and assign participants to seats. Can only be used in combination with DCNM-LSYS and DCNM-LMPM.

Order number **DCNM-LPD**

DCN multimedia Media Sharing

DCN multimedia Media Sharing gives the ability to use share the display of a remote presentation computer to all Multimedia Devices. Can only be used in combination with DCNM-LSYS.

Order number **DCNM-LMS**

DCN multimedia Camera Control

DCN multimedia Camera Control enables Bosch Onvif compliant cameras to be used in the DCN multimedia system. Can only be used in combination with DCNM-LSYS.

Order number **DCNM-LCC**

DCN multimedia Voting at Seat

The DCN multimedia Voting at Seat license gives the ability to manage and control voting sessions on the DCN multimedia device. The license can only be used in combination with DCNM-LSYS.

Order number **DCNM-LSVT**

DCN multimedia Identification at Seat

The DCN multimedia Identification at Seat license gives the ability to login on a DCN multimedia device with a unique username and/or password. The license requires DCNM-LSYS, DCNM-LMPM and DCNM-LPD.

Order number **DCNM-LSID**

DCN multimedia Select Language at Seat

The 'DCN multimedia Select Language at Seat license' enables the language selection feature of the DCN multimedia device. The license can only be used in combination with DCNM-LSYS.

Order number **DCNM-LSSL**

DCN multimedia Software Maintenance Agreement 1 year

DCN multimedia Software Maintenance Agreement for one additional year. Includes the licensed system and seat software upgrades, as well as third-party compatible updates.

Order number **DCNM-1SMA**

DCN multimedia Software Maintenance Agreement 2 years

DCN multimedia Software Maintenance Agreement for two additional years. Includes the licensed system and seat software upgrades, as well as third-party compatible updates.

Order number **DCNM-2SMA**

DCN multimedia Software Maintenance Agreement 5 years

DCN multimedia Software Maintenance Agreement for five additional years. Includes the licensed system and seat software upgrades, as well as third-party compatible updates.

Order number **DCNM-5SMA**

DCN multimedia Webcast Application

Electronic authorization code, DCN multimedia Webcast Application software, to be used with DCNM-LSYS.

Order number **DCNM-LWA**

DCN multimedia Webcast Hosting

Electronic authorization code, DCN multimedia webcast hosting license for 12 months/100 hours.

Order number **DCNM-LWA12M100**

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